What is claimed is:

1. A substrate treating method for performing a predetermined treatment of substrates as immersed in a treating liquid stored in a treating tank, comprising:

a first step of deriving a current treating rate from a relationship between use history and treating rate of the treating liquid and an up-to-date use history of the treating liquid;

a second step of determining a corrected treating time by extending a predetermined treating time according to said current treating rate; and

a third step of treating the substrates for said corrected treating time.

2. A method as defined in claim 1, wherein said first step is executed by taking into account at least one of a treated number of substrates, a treating rate, a treating time, a substrate type, a rate of over-treatment, a substrate coverage of film and an initial treating rate.

3. A method as defined in claim 1, wherein said first step is executed by taking into account at least one of a treated number of substrates, a treating time and a substrate coverage of film.

4. A method as defined in claim 1, wherein said corrected treating time is derived from;

$$A1 = Ti \cdot (Ri/Rm)$$

where Ti is an etching time specified in a recipe with reference to a fresh portion of said treating liquid, Ri is an etching rate of the fresh portion, and Rm is the current etching rate.

5. A method as defined in claim 2, wherein said corrected treating time is derived from;

$$A1 = Ti \cdot (Ri/Rm)$$

where Ti is an etching time specified in a recipe with reference to a fresh portion of said treating liquid, Ri is an etching rate of the fresh portion, and Rm is the current etching rate.

6. A method as defined in claim 3, wherein said corrected treating time is derived from;

$$A1 = Ti \cdot (Ri/Rm)$$

where Ti is an etching time specified in a recipe with reference to a fresh portion of said treating liquid, Ri is an etching rate of the fresh portion, and Rm is the current etching rate.

25 7. A method as defined in claim 1, wherein said treating

liquid includes phosphoric acid.

8. A method as defined in claim 2, wherein said treating liquid includes phosphoric acid.

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9. A method as defined in claim 4, wherein said treating liquid includes phosphoric acid.

10. A method as defined in claim 1, wherein said treating
10 liquid includes hydrofluoric acid.

11. A substrate treating apparatus for performing a predetermined treatment of substrates as immersed in a treating liquid stored in a treating tank, comprising:
15   storage means for storing a relationship between use history and treating rate of the treating liquid and an up-to-date use history of the treating liquid;
        calculating means for deriving a current treating rate from said relationship between use history and treating rate
20 of the treating liquid and said up-to-date use history of the treating liquid; and
        computing means for determining a corrected treating time by extending a predetermined treating time according to said current treating rate;
25   wherein said substrates are treated for said corrected

treating time.

12. A apparatus as defined in claim 11, wherein said calculating means is arranged to take into account at least one of a treated number of substrates, a treating rate, a treating time, a substrate type, a rate of over-treatment, a substrate coverage of film and an initial treating rate.

13. A apparatus as defined in claim 11, wherein said calculating means is arranged to take into account at least one of a treated number of substrates, a treating time and a substrate coverage of film.

14. A apparatus as defined in claim 11, wherein said calculating means is arranged to derive said corrected treating time from;

$$A1 = Ti \cdot (Ri/Rm)$$

where Ti is an etching time specified in a recipe with reference to a fresh portion of said treating liquid, Ri is an etching rate of the fresh portion, and Rm is the current etching rate.

15. A apparatus as defined in claim 12, wherein said calculating means is arranged to derive said corrected treating time from;

$$A1 = Ti \cdot (Ri/Rm)$$

where Ti is an etching time specified in a recipe with reference to a fresh portion of said treating liquid, Ri is an etching rate of the fresh portion, and Rm is the current etching

5 rate.

16. A apparatus as defined in claim 13, wherein said calculating means is arranged to derive said corrected treating time from;

10 $$A1 = Ti \cdot (Ri/Rm)$$

where Ti is an etching time specified in a recipe with reference to a fresh portion of said treating liquid, Ri is an etching rate of the fresh portion, and Rm is the current etching rate.

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17. A apparatus as defined in claim 11, wherein said treating liquid includes phosphoric acid.

18. A apparatus as defined in claim 12, wherein said treat-

20 ing liquid includes phosphoric acid.

19. A apparatus as defined in claim 14, wherein said treating liquid includes phosphoric acid.

25 20. A apparatus as defined in claim 11, wherein said treat-

ing liquid includes hydrofluoric acid.